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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,087	12/13/2001	Kazuyuki Yokoyama	P6402a	6539

20178 7590 03/30/2007  
EPSON RESEARCH AND DEVELOPMENT INC  
INTELLECTUAL PROPERTY DEPT  
2580 ORCHARD PARKWAY, SUITE 225  
SAN JOSE, CA 95131

EXAMINER
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KANG, ROBERT N

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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03/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	10/017,087	YOKOYAMA ET AL.	
	Examiner	Art Unit	
	Robert N. Kang	2625	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 March 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
**TWYLER LAMB**  
**SUPERVISORY PATENT EXAMINER**

Continuation of 11. does NOT place the application in condition for allowance because: Applicant failed to overcome the 35 U.S.C. § 112, 2nd paragraph rejections of claims 46-59 and 63-77.

## DETAILED ACTION

### *Response to Amendment*

1. Terminal disclaimer filed by applicant on 3/21/2007 overcomes the double-patenting rejection of claims 46, 54-59, 63, 71-76. However, the claims are still rejected under 35 U.S.C. § 112.

### *Response to Arguments*

2. Applicant's arguments filed 3/21/2007 have been fully considered but they are not persuasive. Applicant states on page 10 "the exact value of the 'predefined intermediate number of colors' or its constitution (i.e. 'pure color' or 'pure color' mixtures) is irrelevant to the claim language." Unfortunately, the examiner deems these aspects of the invention are extremely relevant to the claim language. Applicant states on page 9, paragraph 2, "Applicants defined 'printable colors' as depending on the mechanical limitations of a printer, and may refer to either the number of inks (and printing medium color) or **alternatively** refer to the number of **visually discernable colors** obtained by combining the number of available ink and medium colors into pixels defined by multiple printer dots." These two definitions result in **vastly different** values.

For example, in a duotone printer which prints in black and red on a white medium, by the first definition (the number of inks and printing medium), the total number of printable colors is **three (3)**.

However by the second definition (visibly discernable colors obtained by combining the number of available ink and medium colors into pixels defined by multiple

printer dots) it is absolutely uncertain what the number is, as the applicant has never clearly defined what is considered "**visibly discernable**."

Based upon the strictest definition of "color", each unique binary value constitutes a different color. Thus, in a duotone printer, to determine the "number of printable colors", the bit depth must be known. For example, if in the example above, each color is represented by 8 bits there are 16 bits total, or 65,535 "colors."

3. After reading the specification, the Examiner asserts that the "predetermined number of colors", "intermediate number of colors," and "printable colors" correspond to a set **color depth**. The examiner has repeatedly reiterated this assertion, stating, "it will be noted that 'color reduction' is used herein to mean reducing color depth or to convert an image to a grey scale or halftone image", to which the applicant states on page 9 "neither claim 46 nor 63, nor any pending claim recite the term 'color reduction.'"

Examiner did not deem it necessary to explain that "applying a first color changing step for changing the number of colors of said original source data from said second number of colors to said intermediate number of colors," where "second number of colors is greater than a predefined intermediate number of colors" is identical to the more concise term, "color reduction." Examiner apologizes for assuming the Applicant was cognizant of this equivalence.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 46-59 and 63-77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant **must clearly and concisely** define what is a **visibly discernable color** and reconcile the difference in values when counting colors between the two **alternative** definitions, as exhaustively explained above.

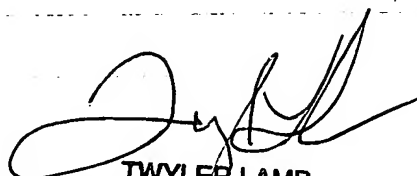
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is 571-272-0593. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



RNK



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